 Name_____

Graphing Polynomial Functions: Basic Shape

Date_____ Period____

Describe the end behavior of each function.

1) $f(x) = x^3 - 4x^2 + 7$

2) $f(x) = x^3 - 4x^2 + 4$

3) $f(x) = x^3 - 9x^2 + 24x - 15$

4) $f(x) = x^2 - 6x + 11$

5) $f(x) = x^5 - 4x^3 + 5x + 2$

6) $f(x) = -x^2 + 4x$

7) $f(x) = 2x^2 + 12x + 12$

8) $f(x) = x^2 - 8x + 18$

State the maximum number of turns the graph of each function could make.

9) $f(x) = x^5 - 4x^3 + 5x + 1$

10) $f(x) = -x^2 - 1$